Appin. No. 10/080,070 Amrit. Detect January 7, 2004 Reply to Office action of October 10, 2003

#### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### Listing of Claims:

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1. (Currently Amended) A discharge lamp comprising:

an envelope;

a discharge-sustaining fill sealed inside the envelope;

first and second electrodes for providing a discharge, at least the first electrode including a current carrying wire and a coil including:

a first coiled structure formed by winding a overwind wire around a first cylindrical member,

a second coiled structure formed by winding the first coiled structure around a second cylindrical member without appreciable overlapping of the coils, the second coiled structure having at least 80 turns per inch,

a third coiled structure formed by winding the second coiled structure around a third cylindrical member, the third cylindrical member having a diameter of at least 1.2 mm, and

an emitter material deposited on the coil, the amount of emitter material being at least 9-16 mg per 11.5 mm length of the coil.

- 2. (Cancelled).
- 3. (Currently Amended) The discharge lamp of claim [[2]] 1, wherein the third cylindrical member has a diameter of at least 1.2-1.5mm.
  - 4. (Cancelled).
- 5. (Currently Amended) The discharge lamp of claim [[4]] 1, wherein the second coiled structure has at least 85 turns per inch.
- 6. (Original) The discharge lamp of claim 1, wherein the third coiled structure is at least 10mm in length.
- 7. (Original) The discharge lamp of claim 6, wherein the third coiled structure is 11-12 mm in length and the lamp is a T8 lamp.
- 8. (Original) The discharge lamp of claim 1, wherein the emitter material comprises an oxide selected from the group consisting of barium, strontium, calcium,

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Appin. No. 10/080,070 Amdr. Deted January 7, 2004 Reply to Office action of October 10, 2003

zirconium, and combinations thereof.

#### 9-11. (Cancelled).

- 12. (Previously Amended) The discharge lamp of claim 1, wherein the second coiled structure has at least 90 turns per inch.
- 13. (Previously Amended) The discharge lamp of claim 1, wherein the secondary coil is about 30 mm in length.
  - 14. (Previously Amended) A discharge lamp comprising: an envelope;

a discharge-sustaining fill sealed inside the envelope;

first and second electrodes for providing a discharge, at least the first electrode including a current carrying wire and a coil including:

a first coiled structure formed by winding a overwind wire around a first cylindrical member,

a second coiled structure formed by winding the first coiled structure around a second cylindrical member, the second coiled structure having at least 80 turns per inch,

a third coiled structure formed by winding the second coiled structure around a third cylindrical member, and

an emitter material deposited on the coil, the amount of emitter material being 10-15mg/30 mm length of secondary coil.

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15. (Currently Amended) A method for forming a coil for a fluorescent lamp, the method comprising:

winding a wire around a first cylindrical member and a current carrying wire to form a first coiled structure;

winding the first coiled structure around a second cylindrical member, without appreciable overlapping of coils, to form a second coiled structure having 80-130 turns per inch; and

winding the second coiled structure around a third cylindrical member to form a third coiled structure, the third structure having a diameter of at least 1 mm; and

coating the third coiled structure with an emitter mix which, when activated, emits electrons when heated, the amount of emitter material being 10-15mg/30 mm length of secondary coil.

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Apple, No. 10/080,070 Amin. Dated January 7, 2004 Reply to Office action of October 10, 2003

- 16. (Original) The method of claim 15, wherein the emitter mix includes carbonates selected from the group consisting of barium carbonate, calcium carbonate, strontium carbonate, and combinations thereof.
- 17. (Original) The method of claim 15, wherein the step of winding the first coiled structure around the second cylindrical member to form a second coiled structure includes winding the first coiled structure at a spacing which provides at least 80 turns per inch.
- 18. (Original) The method of claim 15, further including dissolving the first, second and third cylindrical members in an acid bath.
- 19. (Previously Amended) The method of claim 15, wherein the third cylindrical member has a diameter of at least 1mm.
- 20. (Original) The method of claim 19, wherein the third cylindrical member has a diameter of 1.2-1.5mm.
- 21. (Original) The method of claim 15, wherein the second coiled structure has about 90 turns per inch.
- 22. (Original) The method of claim 15, wherein the third coiled structure is about 11.5 mm in length.
- 23. (Previously Amended) The method of claim 22, wherein the step of coating the third coiled structure with an emitter mix includes coating the third coiled structure with a mixture which includes at least 9 milligrams of one or more carbonates per 30 mm of secondary coil.

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